AMENDMENTS TO THE CLAIMS:

This listing of claims will replace, without prejudice, all prior versions, and listings, of claims in the application.

LISTING OF THE CLAIMS:

1-4. (Canceled).

5. (Previously Presented) A sensor system comprising:

a first sensor powered by a line, the first sensor preprogrammed with a first time interval for transmitting data via the line;

a second sensor powered by the line in parallel with the first sensor, the second sensor preprogrammed with a second time interval for transmitting data via the line;

a first timing sequence control system included in the first sensor; and

a second timing sequence control system included in the second sensor;

wherein, at a point in time of receiving a first power level, the first timing sequence control system is triggered and, upon being triggered, controls the transmission of the first sensor so that the first sensor transmits data via the line for the first time interval,

wherein, at a point in time of receiving the first power level, the second timing sequence control system is triggered and, upon being triggered, controls the transmission of the second sensor so that the second sensor transmits data via the line for the second time interval after the first time interval,

wherein, upon being triggered, the first and second timing sequence control systems control the transmission of the first and second sensors so that the first and second sensors each transmit data via the line at least once independent of any change in a power level received by the first and second timing sequence control systems, and

wherein the first and second timing sequence control systems receive the first power level throughout the first and second time intervals.

6. (Previously Presented) The sensor system according to claim 5, wherein the first and second sensors are always supplied at least a second power level, the second power level being lower than the first power level.

7. (Previously Presented) The sensor system according to claim 5, wherein the first and second sensors detect the first power level via a voltage change.

8. (Previously Presented) The sensor system according to claim 5, wherein the first and second sensors are connected to a control unit via the line, data transmission during the time between the end of the first time interval and the end of the second time interval only being provided from the sensors to the control unit, and not from the control unit to the sensors.

9. (Previously Presented) A method for sequential transmission of sensor data, comprising:

powering a first sensor by a line, the first sensor preprogrammed with a first time interval for transmitting data via the line; and

powering a second sensor by the line in parallel with the first sensor, the second sensor preprogrammed with a second time interval for transmitting data via the line;

wherein a first timing sequence control system is included within the first sensor and a second timing sequence control system is included within the second sensor,

wherein, at a point in time of receiving a first power level, the first timing sequence control system is triggered and, upon being triggered, controls the transmission of the first sensor so that the first sensor transmits data via the line for the first time interval,

wherein, at a point in time of receiving the first power level, the second timing sequence control system is triggered and, upon being triggered, controls the transmission of the second sensor so that the second sensor transmits data via the line for the second time interval after the first time interval,

wherein, upon being triggered, the first and second timing sequence control systems control the transmission of the first and second sensors so that the first and second sensors each transmit data via the line at least once independent of any change in a power level received by the first and second timing sequence control systems, and

wherein the first and second timing sequence control systems receive the first power level throughout the first and second time intervals.

10. (Previously Presented) The method according to claim 9, wherein the first and second sensors are always supplied at least a second power level, the second power level being lower than the first power level.

11. (Previously Presented) The method according to claim 9, wherein the first and second sensors detect at least the first power level via a voltage change.

12. (Previously Presented) The method according to claim 9, wherein the first and second sensors are connected to a control unit via the line, data transmission during the time between the end of the first time interval and the end of the second time interval only being provided from the sensors to the control unit, and not from the control unit to the sensors.

13. (Previously Presented) The method according to claim 9, wherein the first and second sensors are always supplied at least a second power level, the second power level being lower than the first power level, wherein the first and second sensors detect at least the first power level via a voltage change, and wherein the first and second sensors are connected to a control unit via the line, data transmission during the time between the end of the first time interval and the end of the second time interval only being provided from the sensors to the control unit, and not from the control unit to the sensors.

14. (Canceled).

15. (Previously Presented) The method according to claim 9, wherein the first and second sensors are always supplied at least a second power level, the second power level being lower than the first power level, and wherein the first and second sensors are connected to a control unit via the line, data transmission during the time between the end of the first time interval and the end of the second time interval only being provided from the sensors to the control unit, and not from the control unit to the sensors.

16. (Canceled).

17. (Previously Presented) The sensor system according to claim 5, wherein the first and second sensors are always supplied at least a second power level, the second power level being lower than the first power level, and wherein the first and second sensors are connected to a control unit via the line, data transmission during the time between the end of the first

time interval and the end of the second time interval only being provided from the sensors to the control unit, and not from the control unit to the sensors.

18. (Previously Presented) The sensor system according to claim 5, wherein the first and second sensors are always supplied at least a second power level, the second power level being lower than the first power level, wherein the first and second sensors detect the first power level via a voltage change, and wherein the first and second sensors are connected to a control unit via the line, data transmission during the time between the end of the first time interval and the end of the second time interval only being provided from the sensors to the control unit, and not from the control unit to the sensors.

19. (New) A sensor system comprising:

a first sensor powered by a line, the first sensor preprogrammed with a first time interval for transmitting data via the line;

a second sensor powered by the line in parallel with the first sensor, the second sensor preprogrammed with a second time interval for transmitting data via the line;

a first timing sequence control system included in the first sensor; and

a second timing sequence control system included in the second sensor;

wherein, when the first sensor detects an increase in the power received from the line to a first power level, the first timing sequence control system is triggered and, upon being triggered, controls the transmission of the first sensor so that the first sensor transmits data via the line for the first time interval,

wherein, when the second sensor detects an increase in the power received from the line to a first power level, the second timing sequence control system is triggered and, upon being triggered, controls the transmission of the second sensor so that the second sensor transmits data via the line for the second time interval after the first time interval,

wherein, upon being triggered, the first and second timing sequence control systems control the transmission of the first and second sensors so that the first and second sensors each transmit data via the line at least once independent of any change in a power level received by the first and second timing sequence control systems, and

wherein the first and second timing sequence control systems receive the first power level throughout the first and second time intervals.

20. (New) A method for sequential transmission of sensor data, comprising:

powering a first sensor by a line, the first sensor preprogrammed with a first time interval for transmitting data via the line; and

powering a second sensor by the line in parallel with the first sensor, the second sensor preprogrammed with a second time interval for transmitting data via the line;

wherein a first timing sequence control system is included within the first sensor and a second timing sequence control system is included within the second sensor,

wherein, when the first sensor detects an increase in the power received from the line to a first power level, the first timing sequence control system is triggered and, upon being triggered, controls the transmission of the first sensor so that the first sensor transmits data via the line for the first time interval,

wherein, when the second sensor detects an increase in the power received from the line to a first power level, the second timing sequence control system is triggered and, upon being triggered, controls the transmission of the second sensor so that the second sensor transmits data via the line for the second time interval after the first time interval,

wherein, upon being triggered, the first and second timing sequence control systems control the transmission of the first and second sensors so that the first and second sensors each transmit data via the line at least once independent of any change in a power level received by the first and second timing sequence control systems, and

wherein the first and second timing sequence control systems receive the first power level throughout the first and second time intervals.